

Autism Spectrum Disorder Research Portfolio Analysis

Office of Autism Research Coordination (OARC), NIMH

Dawn A. Beraud, Emily B. Einstein, Stephanie I. Mok, Sarah E. V. Rhodes, and Susan A. Daniels



Introduction

- Since 2008, the Office of Autism Research Coordination (OARC), on behalf of the Interagency Autism Coordinating Committee (IACC), has conducted an annual comprehensive analysis of the autism spectrum disorder (ASD) research portfolios of major U.S. Federal agencies and private organizations.
- The intent of these analyses is to better inform the IACC and interested stakeholders about the funding landscape and current directions for ASD research.

Data Collection

 The most recent Portfolio Analysis Report, which covered 2011 and 2012, includes data from 12 Federal agencies and 8 private organizations.

FEDERAL AGENCIES PRIVATE ORGANIZATIONS Administration for Children and Families (ACF) Autism Research Institute (ARI) Administration for Community Living (ACL) Autism Science Foundation (ASF) Agency for Healthcare Research and Quality Autism Speaks (AS) Brain & Behavior Research Foundation (BBRF) (AHRO) Centers for Disease Control and Prevention Center for Autism and Related Disorders (CARD) (CDC) Organization for Autism Research (OAR) Centers for Medicare & Medicaid Services (CMS) • Simons Foundation (SF) Department of Defense (DOD) Southwest Autism Research & Resource Center o Air Force (AF) o Autism Research Program (ARP) Department of Education (ED) Environmental Protection Agency (EPA) Health Resources and Services Administration National Institutes of Health (NIH National Science Foundation (NSF) Substance Abuse and Mental Health Services Administration (SAMHSA)

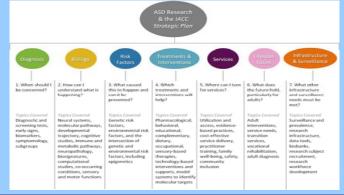
- Information collected on ASD research projects includes: project title, grantees (PIs), funder, grantee institution, annual funding, award period, and project description.
- The Portfolio Analysis examines the extent to which individual research projects align with two coding systems:
- The 78 research objectives laid out in the 2011 IACC Strategic Plan for ASD Research (see middle panel), This enables tracking of the progress made towards achieving the goals set out in the Plan
 - OARC staff work with program officials at the different funders to assign the most appropriate objective code to each project that is reported.
- Research subcategories which also fall under the seven key areas outlined by the Strategic Plan (see middle panel).
- This internal OARC coding system organizes the projects into groups that share common elements or themes. This provides a complementary coding system which is very user-friendly and captures projects that do not align with specific objectives of the Strategic Plan.

IACC/OARC

- The Interagency Autism Coordinating Committee (IACC) is a Federal advisory committee mandated by Congress to coordinate all efforts within the Department of Health and Human Services (HHS) concerning ASD.
- Through its inclusion of both Federal and public members, the IACC helps to ensure that a wide range of ideas and perspectives are represented and discussed in a public forum.
- The IACC mission is to:
 - Provide advice to the Secretary of Health and Human Services regarding Federal activities related to autism spectrum disorder.
 - Facilitate the exchange of information on and coordination of ASD activities among the member agencies and organizations.
- Increase public understanding of the member agencies' activities, programs, policies, and research by providing a public forum for discussions related to ASD research and services.
- The Office of Autism Research Coordination (OARC) coordinates and manages the IACC and related cross-agency ASD activities, programs, and policies.

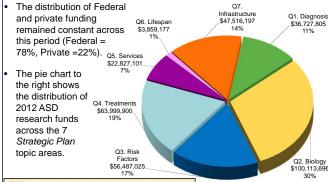
IACC Strategic Plan for ASD Research

- The IACC Strategic Plan is organized around seven general topic areas that
 are represented as consumer-focused Questions (see diagram below). For
 example, Question 1, "When should I be concerned?" covers the topic of
 screening and diagnosis.
- Associated with each question is a list of specific long- and short-term objectives. The objectives were created by the IACC to address critical gaps and opportunities they identified in the research landscape.
- The IACC Strategic Plan was launched in 2009 and is updated annually. New
 objectives have been added over the years, with the most recent objectives
 added in 2011; all subsequent Portfolio Analyses have been coded to this
 version.



2011-2012 Portfolio Analysis Report Findings

 The estimated investment in ASD research across government and private funders increased slightly from 2011-2012 (2011: \$299,628,985; 1225 projects. 2012: \$331,530,901; 1309 projects).





 Map (left): Distribution of ASD research projects across U.S. and Canadian research institutions in 2012

2008-2012 Overview

\$400
\$400
\$5400
\$5400
\$5300
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200
\$5200

- Bar chart (left): Total ASD research funding per year (as reported in IACC Portfolio Analysis Reports) from 2008 to 2012 shows an overall upward trend; in 2009 and 2010, additional one-time funding for autism research was provided by the American Reinvestment and Recovery Act of 2009 (ARRA).
- Bar chart (right): Percentage of ASD research funding from Federal vs. private funders increased from 65% in 2008, before the release of the first IACC Strategic Plan, to 76% in 2009

Summary

- The annual IACC Portfolio Analysis Report can be used by Federal agencies and private research organizations to help guide future funding priorities by outlining current gaps and opportunities in ASD research, as well as serving to highlight current activities and research progress.
- In addition to the Portfolio Analysis Report, the IACC/OARC Portfolio Analysis Web Tool, is also available on the IACC website (see separate noster)